Atty Dkt: 034047.003DIV1 (WRAIR 00-23)

REMARKS

The Office action mailed 28 January 2010, has been received and its contents carefully noted. Claims 29-36, 39 and 40 were pending, claims 31-34 and 36 were withdrawn from consideration, and claims 29, 30, 35, 39 and 40 were rejected. By this Response, claim 29 has been amended to alleviate a typographical error. Specifically, during prosecution, the word "factor" was inadvertently inserted after "a sensitivity coefficient sample by". Support may be found in the Specification and claims as originally filed. No statutory new matter has been added. Therefore, entry of the amendment and reconsideration in view of the following are respectfully requested.

Rejection under 35 U.S.C. 102(b)

The Examiner rejected claims 29, 30, 35, and 39 under 35 U.S.C. 102(b) as being anticipated by London (1995). The Examiner asserts that London teaches each and every limitation of the claimed invention including software for calculating protein concentration.

Applicants respectfully submit that London does not teach each and every limitation of the claimed invention. Although London discloses software for calculating protein concentration at page 59, left column, 2nd full paragraph, line 5, Applicants respectfully submit that the software according to London is not the same as the software according to the instant invention as set forth in the claims.

In particular, as set forth in claim 29, the software calculates the activity or the concentration of the protein <u>using a set of equations which factor in a sensitivity coefficient</u> for each substrate and for each protein and the reaction rates. As set forth in claim 29, the sensitivity coefficient is one that is determined from a sensitivity coefficient sample by obtaining a plurality of inhibited dilutions of the sensitivity coefficient sample, wherein the plurality of inhibited dilutions comprise a plurality of concentrations of the protein which are partially to completely inhibited; exposing each inhibited dilution of the plurality of inhibited dilutions to each substrate; measuring the reaction rates between each uninhibited protein in each inhibited dilution and each substrate; calculating the linear relationships between the reaction rates of each uninhibited protein and each concentration of the sensitivity coefficient sample at infinite inhibitor concentration; and extracting each sensitivity coefficient of each substrate for each protein from

the calculated linear relationships. Nowhere does London teach or suggest a sensitivity coefficient that is the same as the one as set forth in claim 29. Therefore, the software of London is not the same as the software as the software required by claim 29 because the software of London does not calculate the activity or the concentration of the protein <u>using a set of equations</u> which factor in a sensitivity coefficient for each substrate and for each protein and the reaction rates.

Consequently, London does not teach each and every limitation of the claimed invention and the rejection under 35 U.S.C. 102(b) should properly be withdrawn.

Rejection under 35 U.S.C. 103(a)

The Examiner rejected claims 29 and 40 under 35 U.S.C. 103(a) as being unpatentable over London in view of Jacobs (1993). In particular, the Examiner indicated that London does not teach cartridge triggered device automation, but the Examiner asserted that such would have been obvious in view of Jacobs.

Applicants respectfully submit that London and Jacobs, alone or in combination, do not teach or suggest the claimed invention as a whole. In particular, neither London nor Jacobs teaches or suggests a device which contains software which calculates the activity or the concentration of the protein <u>using a set of equations which factor in a sensitivity coefficient</u> for each substrate and for each protein and the reaction rates as required by claim 29.

Therefore, Applicants respectfully submit that a *prima facie* case of obviousness has not been established and the rejection under 35 U.S.C. 103(a) must properly be withdrawn.

Request for Rejoinder

Applicants respectfully request rejoinder of the withdrawn claims which ultimately depend on claim 29.

Request for Interview

Either a telephonic or an in-person interview is respectfully requested should there be any remaining issues.

CONCLUSION

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Therefore, it is respectfully requested that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

It is not believed that extensions of time are required, beyond those that may otherwise be provided for in accompanying documents. However, in the event that additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. 1.136(a), and any fees required therefor are hereby authorized to be charged to **Deposit Account No. 210-380**, Attorney Docket No. **034047.003DIV1** (WRAIR 00-23).

Respectfully submitted,

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